

COL14A1 (1C8): sc-517033

BACKGROUND

The extensive family of COL gene products (collagens) is composed of several chain types, including fibril-forming interstitial collagens (types I, II, III and V) and basement membrane collagens (type IV), each type containing multiple isoforms. Collagens are fibrous, extracellular matrix proteins with high tensile strength and are the major components of connective tissue, such as tendons and cartilage. All collagens contain a triple helix domain and frequently show lateral self-association in order to form complex connective tissues. Several collagens also play a role in cell adhesion, important for maintaining normal tissue architecture and function. COL14A1 (collagen α -1 (XIV) chain), also known as UND (undulin), is a 1,796 amino acid secreted protein that belongs to the fibril-associated collagens with interrupted helices (FACIT) family. Existing as three alternatively spliced isoforms, COL14A1 assists in integration of collagen bundles and localizes to extracellular matrix.

REFERENCES

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- Cremer, M.A., et al. 1998. The cartilage collagens: a review of their structure, organization, and role in the pathogenesis of experimental arthritis in animals and in human rheumatic disease. J. Mol. Med. 76: 275-288.
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CHROMOSOMAL LOCATION

Genetic locus: COL14A1 (human) mapping to 8q24.12.

SOURCE

COL14A1 (1C8) is a mouse monoclonal antibody raised against amino acids 1-759 representing full length COL14A1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

COL14A1 (1C8) is recommended for detection of COL14A1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

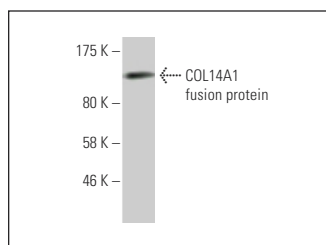
Suitable for use as control antibody for COL14A1 siRNA (h): sc-77734, COL14A1 shRNA Plasmid (h): sc-77734-SH and COL14A1 shRNA (h) Lentiviral Particles: sc-77734-V.

Molecular Weight of COL14A1 isoforms 1/2/3: 194/192/183 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



COL14A1 (1C8): sc-517033. Western blot analysis of human recombinant COL14A1 fusion protein.

RESEARCH USE

For research use only, not for use in diagnostic procedures.